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Division Director



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August 31, 1990

Ms. Mary Lozano Environmental Coordinator Chevron Chemical Manila Star Route Vernal, Utah 84078

Dear Ms. Lozano:

Re: <u>Site Visit, Vernal Phosphate, Chevron Chemical, M/047/007, Uintah County,</u> Utah

Tony Gallegos and I would like to convey our appreciation to you and other members of the Chevron Chemical staff, for the mine tour on August 17, 1990.We enjoyed discussing the various reclamation projects you have initiated across your site. Some of your treatments are very interesting from both a professional and academic perspective.

As always, we remain impressed by the reclamation efforts and progress made by Chevron at this mine. Your site, no doubt, can brag about some of the best mined land reclamation work in the state. It is an example of excellent reclamation work which we hope to use as an inspiration for other operators in the state.

After inspection of the Vernal Phosphate site, our only concerns have to do with the final reclamation of the tailings pond. No definitive plan currently exists describing final reclamation of this facility. Even though the life expectancy of this facility extends far into the future, we feel that it is important, at this juncture, to initiate consideration of ultimate reclamation so that the currently evolving pond design might take into account reclamation and decommissioning constraints.

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Some questions which might be addressed might include:

- 1) what physical and chemicals properties characterize the tailings material?
- 2) what time frames might be required for dewatering the tailings?
- 3) what physical constraints exist for dewatering the tailings?
- 4) what is the load-bearing capacity of the tailings at various locations within the pond perimeter?
- 5) what steps might need to be taken to increase the loadbearing capacity of the tailings?
- 6) what amendments might be needed to initiate plant growth on the tailings?
- 7) what species might be best adapted to the tailings?
- 8) what type of reclamation might be necessary in light of the Division of Environmental Health's new Groundwater Discharge Permit requirements (clay, caps, depth of rooting medium, etc.)?

Please send us any current information you have which addresses characterization of the tailings material, or studies which you have initiated to evaluate plant growth on the material. Please also let us know at your earliest convenience, what steps you plan to take regarding the items discussed above.

Thanks again for your time and cooperation.

Sincerely,

Holland Shepherd Reclamation Specialist

jb cc:

Lowell Braxton Wayne Hedberg Tony Gallegos